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The overexploitation of natural resources in Gorkha: social and economic causes

Müller-Böker, Ulrike

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RESEARCH NOTE

THE OVEREXPLOITATION OF NATURAL RESOURCES IN GORKHA: SOCIAL AND ECONOMIC CAUSES

Ulrike Müller-Boker

Destruction of forest and erosion, problems of water balance and even natural catastrophes: all these are consequences of the excessive exploitation of natural resources. The relation between socio-economic structure and its resulting pressure upon ecosystems will be analyzed as one aspect of ecological-geographical investigations (cp. HAFFNER, 1986 and POHLE, 1986) taking Gorkha as an example.

The population of Gorkha is made up of various ethnic groups. The Newar dominate the bazaar and the Chetri, the Bahun and the Jogi the surrounding rural areas. Several "impure" Nepalese castes are present besides the Magar. If one value the settlements according to the ecological advantages of their location, one can see that the typical site of a Newar settlement is the topographically favorable flat area, where there is a good supply of drinking water. Khet land (irrigated rice land) lies only a short distance away. On the other hand, the majority of the Chetri live on steep slopes of bari land (upland fields), where there is only an inadequate supply of drinking water. Khet land can only be reached by way of long, steep paths. The settlements of the Sarki, the Damai and the Jogi are located on the steep slopes below the palace where condition are bad as regards relief, soil and drinking water. As far as the Jogi are concerned, the choice of this location for their settlement was probably influenced by its proximity to the Gorkhnath temple, whereas it is typical for the situation of the "impure" castes to be driven to occupy such peripheral locations.

The majority of Gorkha's inhabitants is economically dependent upon agriculture. The number of full-time farmers is quite small. Many households, whose farms are too small to support a steadily increasing number of members, are dependent upon a second source of income, i.e. farming that is carried out along with another occupation, usually with the aid of day labourers. In particular, members of the "impure" castes and even a few Magar and Shrestha find a part-time occupation as jyami-porters, farm or building workers. Often the Sarki work the land for others as tenants but without tenant status. Families who engage, to a large extent, in trade seldom farm their lands themselves. They have all the work done by labourers. This group of very wealthy people, usually Shrestha, determines business life in Gorkha. Those who are completely without any land are mainly the Kami and the Damai.

In the Gorkha region, one can assume the average size of a property to be about 20 ropani (ca. 1 ha). However, at least 25 ropani are necessary to support an average family when the soil is of good quality. This means that the average farm is still under the minimum size needed for subsistence. The properties of the households investigated in Gorkha ranged from 3 to 96 ropani. We can see that the land is not evenly distributed, as there is no shortage of land, in particular amongst tradesmen and the higher castes, whereas impure castes not only have little, but also poor quality land.

According to some estimates, c. 80% of the inhabitants of the Gorkha region do not have enough land to be able to supply their families with basic foodstuffs all year round. The shortage of land obliges the farmers to employ an extremely intensive form of agricultural exploitation. They manage to achieve astoundingly high yields on poor soil using crop rotation systems which produce two to three harvests per year. However, the negative effects of such intensive land use can already be seen today. The fertility of the soil is steadily decreasing, because the periods are too short when fields are allowed to lie fallow. The application of mineral fertilizer can only improve this situation to a certain extent, owing to the poor exchange capacity of the soil. Fields are laid out in areas which are ecologically unsuitable: a practice which brings little profit and is ecologically unjustifiable. It is quite wrong to assume that the growing population can be fed in future by taking measures to intensify farming or by extending cultivation areas. Nowadays, one can already see the trend for many young people to turn to other employment or even to emigrate.

In the Gorkha land register we find *raikar* and *guthi* land, i.e. owners

of fields are either private persons or registered as *guthi*. There is a remarkable amount of *guthi* land in Gorkha; the tenants are mostly Jogi and Bahun and some are Shrestha. Many *guthi* tenants have their land farmed for them by labourers on a crop sharing basis. If the *guthi* receives no services from the *guthi* tenants, for example as *pujari*, it claims a share of the harvest. According to the land register data, all owners of *raikar* land farm their fields themselves. No tenants are mentioned. However, in fact, between 20% and 30% of the fields are not cultivated by the owners themselves but by labourers. Although these labourers work the land quite independently just like tenants, they do not enjoy the rights of a tenant. It is customary for the landlord to claim half of the total harvest, whereas according to the law, a registered tenant need only forfeit half of his main harvest. Unlike the tenant, the field worker may be dispossessed by the owner at any time and it is indeed a fact that the owners often replace labourers so as to avoid the possibility of their becoming eligible for a legal claim to a part of the land. This evasion of the tenancy laws not only keeps the field workers themselves in an extremely precarious economic situation but also has a negative effect upon agricultural productivity. Labourers have neither capital nor security to invest time and energy in measures to increase farming intensity, as he is not entirely economically dependent upon agriculture. Thus, it could be observed that well irrigated fields were only in use once a year for a rice crop, whereas upland fields of marginal soil in ecologically unfavourable locations were intensively worked, because they belonged to the farmers themselves. It would be desirable, both from an economic and an ecological point of view, to recognize the labourers' tenancy status as set out in the Nepalese agrarian law.

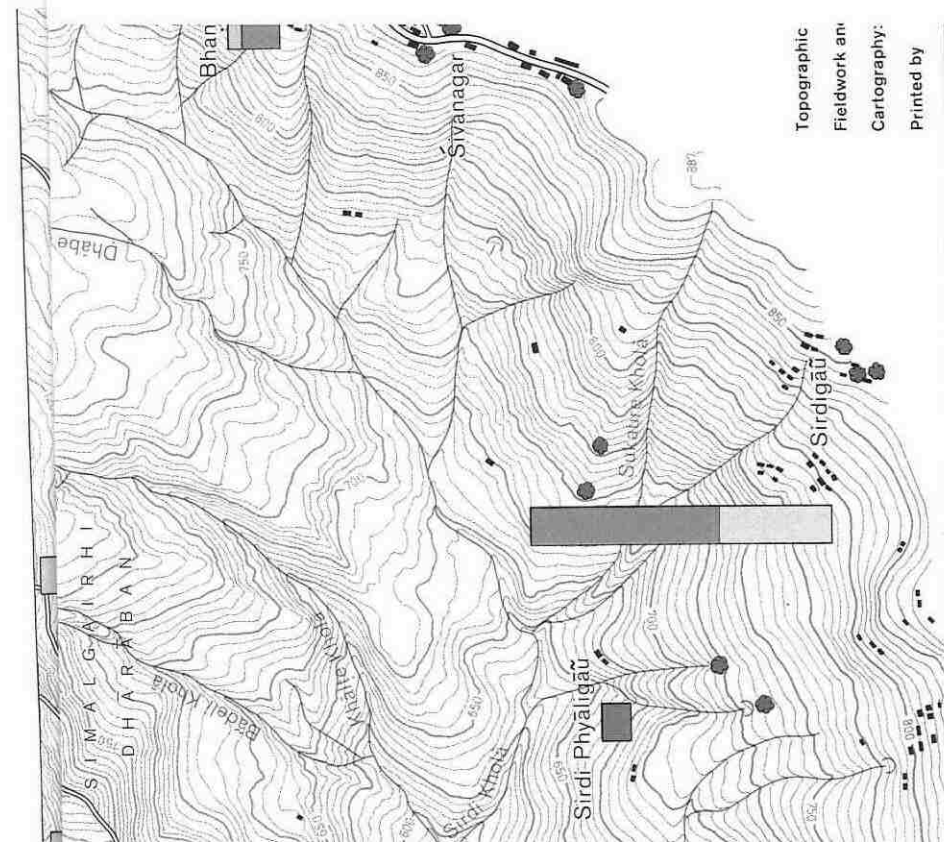
A common practice is to employ day labourers during the planting and harvest seasons. Families with a few members capable of work or those where certain members already have a steady job usually have the majority of the work done by day labourers. In contrast to the situation of the farm workers, the management of the farm lies in the hands of the owners. It is not always profitable to have day labourers do the work in the fields, as wages are too high in comparison to yield. Thus, some owners of land prefer more extensive use of the land, for example by harvesting only one crop per year. There are even cases of land being left to lie fallow in a region, where there is an acute shortage of land.

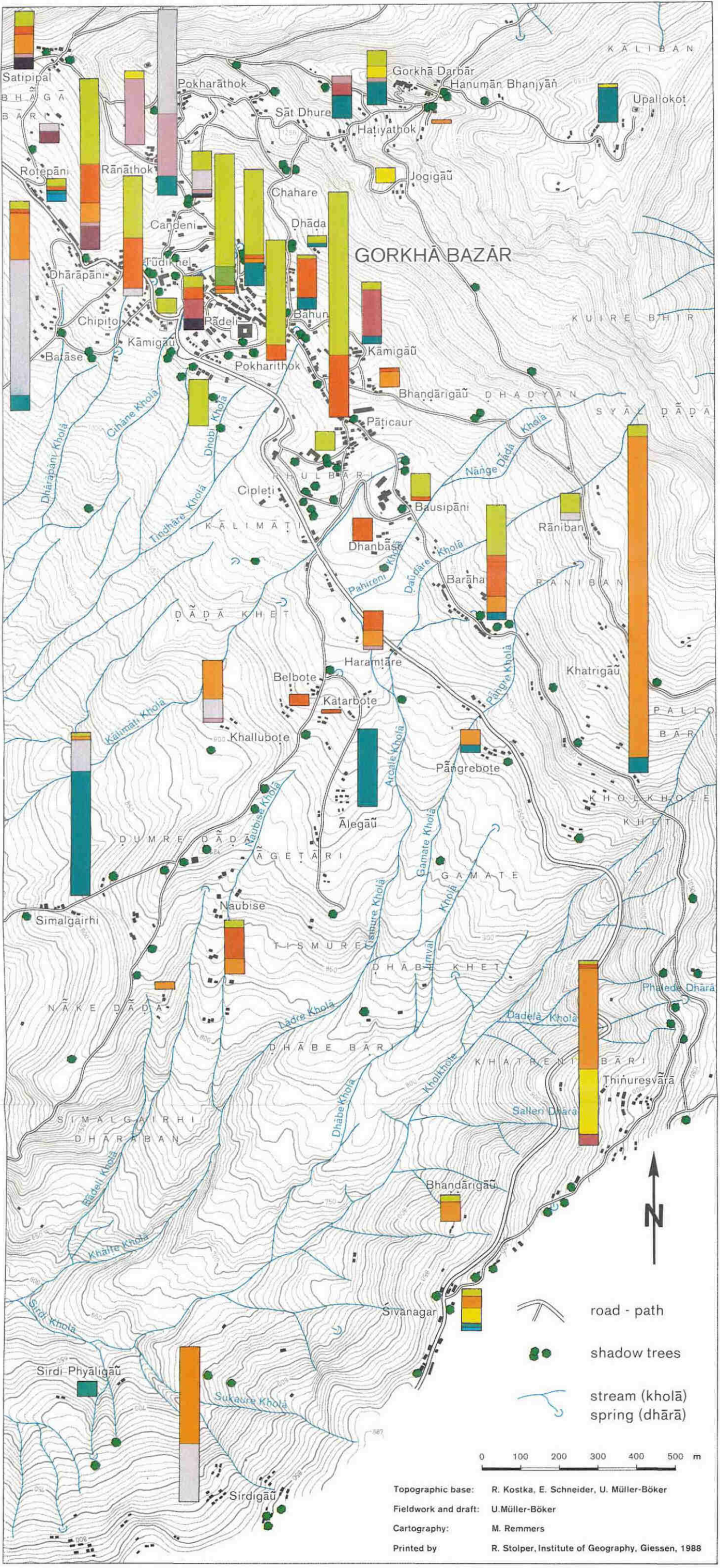
When one examines the cadastral maps, one is immediately struck by the conglomeration of small allotments into which the land is divided up. Thus, there is not only little land available for farms, but what there does

Most people are of the opinion that the government is not able to work particularly efficiently. On the other hand, absolute miracles are expected from both the state and from development projects, onto which the responsibility for environmental protection has been thrust all too easily. Some of the people I talked to pointed out quite rightly that measures to prevent erosion can only be carried out successfully if the local inhabitants can again be brought to accept responsibility for their own surroundings. The fact that agriculture in the Gorkha region is so productive proves that its inhabitants must be well aware of the processes in their natural environment. A traditional understanding of the environment is also expressed in the language: the names of settlements and terrains in the region reflect both the economic dependency of the predominantly farming population on the natural environment and also a thorough knowledge of it.

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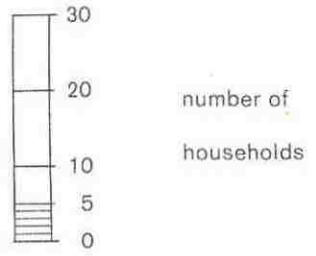




GORKHĀ - SIRDĪ KHOLĀ

Ethnic Groups and Castes

Survey Map of the Region 1 : 100 000



Ethnic Groups and Castes

- Śreṣṭha
- Śākya
- Bāhun
- Chetri
- Jogi
- Sārki
- Damāi
- Kāmi
- Gāine
- Kasāi
- Magar
- Guruṅg

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